

2022 ANDROSCOGGIN LAKE WATERSHED SURVEY Summary Fact Sheet

SURVEY FACTS

- Survey Dates:** May 12 & 13, 2022
- Lake Name:** Androscoggin Lake
- Watershed Location:** Wayne, Leeds, & Monmouth, Maine
- Watershed Area:** 23 square miles
- Total # of Sites Identified:** 142

This survey was a collaboration of the Androscoggin Lake Improvement Corporation (ALIC), 30 Mile River Watershed Association (30 Mile), and Maine Department of Environmental Protection, with support from the towns of Wayne and Leeds.

Purpose

Soil erosion is the #1 source of contamination to Maine lakes. Soil particles carry **phosphorus** - a nutrient that algae use to grow. Soil carried in stormwater runoff deposits phosphorus into nearby streams and lakes, where it is taken up by algae. Too much phosphorus leads to an increase in algae, or algae blooms - like the one documented in Androscoggin Lake in 2021.

Over time, phosphorus builds up in lake sediments. It can be released from lake sediments in a process known as **internal loading**. This happens when oxygen loss occurs at the bottom of the lake, triggering a reaction that releases phosphorus from the sediment back into the water column.

Androscoggin is listed on **Maine DEP's NPS Priority Watershed List** due to its sensitive sediment chemistry. This means that the sediments at the bottom of the lake are more likely to release phosphorus should oxygen loss occur at the sediment-water interface.

The survey was designed to identify soil erosion that may be contributing excess phosphorus to Androscoggin Lake.

Androscoggin Lake Watershed Survey
2022 Identified NPS Sites

Legend

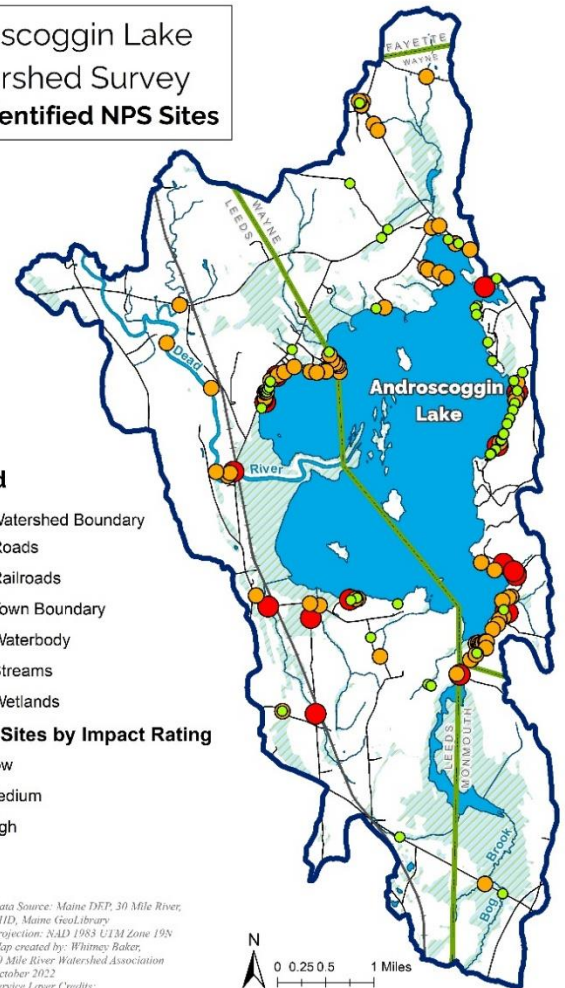
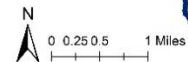
- Watershed Boundary
- Roads
- Railroads
- Town Boundary
- Waterbody
- Streams
- Wetlands

Survey Sites by Impact Rating

- Low
- Medium
- High



Data Source: Maine DEP; 30 Mile River, NPS; Maine GeoLibrary
Projection: NAD 1983 UTM Zone 18N
Map created by: Whitney Baker,
30 Mile River Watershed Association
October 2022
Service Layer Credits:



Androscoggin Lake Water Quality

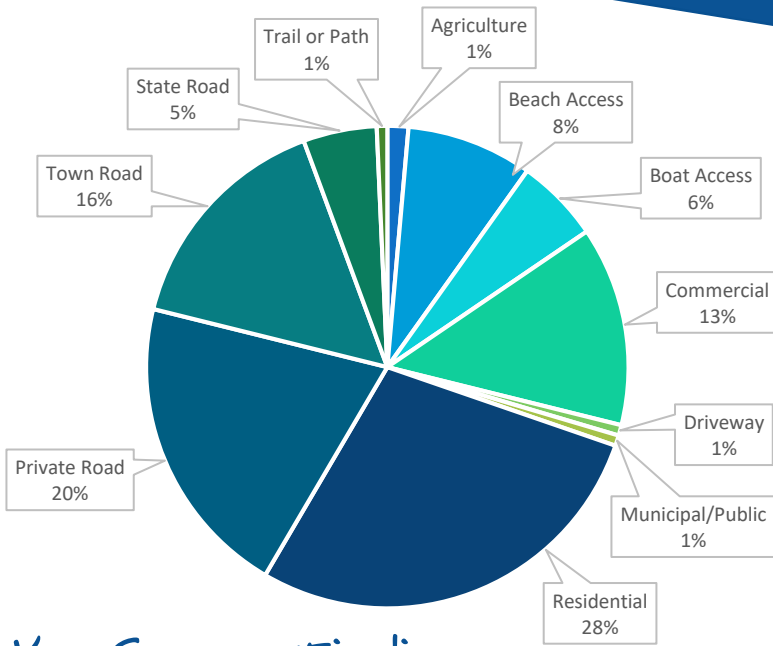
- Water Quality:** Lower than average
- Potential for Algae Blooms:** Moderate
- Dissolved Oxygen Depletion:** Some
- Internal Recycling Potential:** Moderate
- On NPS Priority List:** Yes- "threatened" due to sensitive sediment chemistry



Photo: Watershed survey volunteers and technical leaders



SURVEY RESULTS



	IMPACT RATING			TOTAL
	High	Med	Low	
Agriculture	0	2	0	2
Beach Access	1	9	2	12
Boat Access	1	6	1	8
Commercial	2	15	2	19
Driveway	1	0	0	1
Municipal/Public	0	0	1	1
Residential	1	20	19	40
Private Road	6	10	13	29
Town Road	4	11	7	22
State Road	0	6	1	7
Trail or Path	0	0	1	1
TOTAL	16	79	47	142

Key Survey Findings

Survey volunteers and technical leaders identified a total of **142 sites** across 11 different land uses that are likely impacting water quality in Androscoggin Lake. Findings include:

- 11% (16 sites) were determined to be **high impact**, and 56% (79 sites) were identified as **medium impact**. High and medium impact sites contribute higher amounts of pollution to the lake, and should be of highest priority for remedial action.
- High and medium impact sites were documented on a wide range of land use types, highlighting the fact that **EVERYONE** has a role to play in lake protection.
- 33% of all identified sites were classified as **low impact** to water quality (47 sites). 40% of all low impact sites were found on residential properties. Though low impact sites likely contribute less pollution individually, many sites can collectively have a big impact.
- Nearly 30% of all identified sites were documented on **residential properties**.
- Sites associated with **roads and driveways** made up over 40% of all sites (59 sites in total) and had varying impact ratings: 11 high impact, 27 medium impact, and 21 low impact sites.

Next Steps

Individual Citizens:

- Join ALIC today!
- Request a LakeSmart visit from ALIC's team of trained volunteers.
- Address any erosion on your property. Contact ALIC or 30 Mile for guidance.
- Stop mowing and raking – let lawn areas revert back to vegetated, natural spaces.
- Install or improve the vegetated buffer on your shoreline by planting native shrubs.
- Avoid exposing bare soil – seed and mulch all bare areas.
- Maintain your septic system.
- Stop the use of fertilizers containing phosphorus.

Androscoggin Lake Improvement Corporation:

- Address low-impact, low-cost sites through ALIC's LakeSmart program
- Share information on "Best Management Practices" and how we can work together to help protect and improve water quality.
- Continue to collaborate with 30 Mile and towns on projects, grants, and ongoing monitoring.

30 Mile River Watershed Association:

- Distribute results to landowners with identified sites & provide guidance for remedial actions.
- Provide the services of the Youth Conservation Corps to fix erosion problems, where applicable.
- Support landowners on gravel roads, watershed towns, & ME DOT to address problems on private, town, & state roads.
- Apply for grants to help fund high-cost fixes at priority sites.

For the full survey report, visit www.30mileriver.org